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TITLE:
Participation in the 1996 Arlindo Cruise to the Indonesian Seas

Final Report
for
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National Aeronautics and Space Administration

submitted by

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Inventions/Patents/Reportables: NONE

The objective of Arlindo-Productivity is to understand the factors responsible for regional differences in the response of phytoplankton and zooplankton to the SE and NW Monsoons in Indonesia. The hypothesis is that an interplay between circulation and shoaling of the nutricline, as a response to the monsoons, regulates productivity in the Indonesian Seas. My objective for the cruise in 1996 was to continue our collaboration with Indonesian scientists by conducting a set of hydrographic, primary production and spectral irradiance observations in the Indonesian Seas.

This grant paid for shipping, travel and incidental costs associated with participation in the cruise in December, 1996. Ship costs were borne by the Indonesian Institute of Sciences as part of the collaborative effort. A plan for Arlindo in 1996 was agreed upon in March, 1996, by Indonesian scientists together with Arnold Gordon. The plan called for a 20-day physical oceanography and mooring cruise in November, 1996, followed by a 5-day bio-optical cruise. The bio-optical cruise departed from, and returned to, Ambon, and sampled in the Banda Sea.

We completed a series of chlorophyll analyses, both a sampling of surface variability and depth profiles in the Banda Sea. We also completed three MER profiles for depth profiles of spectral irradiance. These data have a useful by-product in that they can be used for vicarious calibration of the OCTS sensor aboard the ADEOS satellite. As such, the data has been transmitted to NASDA in Japan for their use.